



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/791,117      | 03/02/2004  | Robert Geoffrey Ward | 10031365-1          | 2646             |

7590 06/25/2008  
AGILENT TECHNOLOGIES, INC.  
Legal Department, DL 429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

|          |
|----------|
| EXAMINER |
|----------|

ALIA, CURTIS A

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2616

|           |               |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

06/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/791,117

**Applicant(s)**

WARD, ROBERT GEOFFREY

**Examiner**

Curtis A. Alia

**Art Unit**

2616

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on 15 January 2008 has been entered. Claims 2, 8, 10, 11 and 17-24 have been amended. Claims 1-24 are still pending in this application, with claims 1, 9 and 17 being independent.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1-2, 9-10, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein et al. (previously cited US 5,999,529) in view of Lee (newly cited US 2003/0088685).

Regarding claim 1, Bernstein discloses an asynchronous transfer mode system comprising a circular buffer for storing ATM data, the ATM data comprising information divided into cells (see column 3, lines 66-67, FIFO buffer receives ATM cells from the ATM network) and

a plurality of parallel processing elements (see column 4, lines 2-5, parallel processing modules) configured to analyze the ATM cells and determine a cell type (see column 2, lines 61-

66, VoA processing modules at least one type of VoA adaptation layer type, column 4, lines 40-44, the circuitry determines how to assemble the cells appropriately according to the adaptation layer the cells are formatted to, thus being able to determine the type of adaptation layer the cells are using).

Bernstein does not explicitly teach that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Lee. In particular, Lee teaches that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time (see abstract and paragraph 21, AAL2 and AAL5 traffic are processed in such a way as to maintain the quality of service required by voice data, that data being real-time data, thus having to process the AAL2 and AAL5 cells in real-time to maintain that quality of service).

In view of the above, having the system of Bernstein, then given the well-established teaching of Lee, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein as taught by Lee, since Lee stated in paragraph 16 that maintaining distinction between real-time data and non-real-time data will increase QoS performance and link failure can be actively dealt with.

Regarding claim 2, Bernstein discloses that the circular buffer communicates with the plurality of parallel processing elements simultaneously (see column 4, lines 2-5, buffering allows multiple processing modules to be used in parallel to yield a higher throughput and high degree of scalability).

Regarding claim 9, Bernstein discloses a method for an ATM system comprising providing ATM data to a circular buffer, the data comprising information divided into cells (see column 3, lines 66-67, FIFO buffer receives ATM cells from the ATM network),

storing the ATM data in the circular buffer (see column 3, lines 66-67), analyzing the ATM cells to determine a cell type (see column 2, lines 61-66, VoA processing modules at least one type of VoA adaptation layer type, column 4, lines 40-44, the circuitry determines how to assemble the cells appropriately according to the adaptation layer the cells are formatted to, thus being able to determine the type of adaptation layer the cells are using).

Bernstein does not explicitly teach that the AAL 2 cells and AAL 5 cells are reassembled in real time.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Lee. In particular, Lee teaches that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time (see abstract and paragraph 21, AAL2 and AAL5 traffic are processed in such a way as to maintain the quality of service required by voice data, that data being real-time data, thus having to process the AAL2 and AAL5 cells in real-time to maintain that quality of service).

In view of the above, having the method of Bernstein, then given the well-established teaching of Lee, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Bernstein as taught by Lee, since Lee stated in paragraph 16 that maintaining distinction between real-time data and non-real-time data will increase QoS performance and link failure can be actively dealt with.

Regarding claim 10, Bernstein teaches simultaneously communicating between the circular buffer and the plurality of parallel processing elements (see column 4, lines 2-5, buffering allows multiple processing modules to be used in parallel to yield a higher throughput and high degree of scalability).

Regarding claim 17, Bernstein discloses a computer readable medium having a program stored thereon for reassembling ATM data in real-time comprising logic for providing ATM data to a circular buffer, the data comprising information divided into cells (see column 3, lines 66-67, FIFO buffer receives ATM cells from the ATM network),

logic for storing the ATM data in the circular buffer (see column 3, lines 66-67), logic for analyzing the ATM cells to determine a cell type (see column 2, lines 61-66, VoA processing modules at least one type of VoA adaptation layer type, column 4, lines 40-44, the circuitry determines how to assemble the cells appropriately according to the adaptation layer the cells are formatted to, thus being able to determine the type of adaptation layer the cells are using).

Bernstein does not explicitly teach that the AAL 2 cells and AAL 5 cells are reassembled in real time.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Lee. In particular, Lee teaches that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time (see abstract and paragraph 21, AAL2 and AAL5 traffic are processed in such a way as to maintain the quality of service required by voice data, that data being real-time data, thus having to process the AAL2 and AAL5 cells in real-time to maintain that quality of service).

In view of the above, having the computer readable medium of Bernstein, then given the well-established teaching of Lee, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Bernstein as taught by Lee, since Lee stated in paragraph 16 that maintaining distinction between real-time data and non-real-time data will increase QoS performance and link failure can be actively dealt with.

Regarding claim 18, Bernstein discloses logic for simultaneously communicating between the circular buffer and the plurality of parallel processing elements (see column 4, lines 2-5, buffering allows multiple processing modules to be used in parallel to yield a higher throughput and high degree of scalability).

4. Claims 3-4, 11-12, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of Lee as applied to claims 2, 10 and 18 above, and further in view of Suzuki et al. (previously cited US 6,687,250).

Regarding claim 3, Bernstein and Lee do not explicitly teach a fragmentation table configured to receive and store data fragments associated with an ATM cell.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches a fragmentation table configured to receive and store data fragments associated with an ATM cell (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames).

In view of the above, having the system of Bernstein and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 4, Bernstein and Lee do not explicitly teach a buffer manager configured to accumulate the data fragments and assemble the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches a buffer manager configured to accumulate the data fragments and assemble the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the system of Bernstein and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 11, Bernstein and Lee do not explicitly teach receiving and storing data fragments associated with an ATM cell in a fragmentation table.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches receiving and storing data fragments associated with an



ATM cell in a fragmentation table (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames).

In view of the above, having the method of Bernstein and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Bernstein and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 12, Bernstein and Lee do not explicitly teach accumulating the data fragments in a buffer manager and assembling the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches accumulating the data fragments in a buffer manager and assembling the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the method of Bernstein and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Bernstein and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 19, Bernstein and Lee do not explicitly teach logic for receiving and storing data fragments associated with an ATM cell in a fragmentation table.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches logic for receiving and storing data fragments associated with an ATM cell in a fragmentation table (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames).

In view of the above, having the computer readable medium of Bernstein and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Bernstein and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 20, Bernstein and Lee do not explicitly teach logic for accumulating the data fragments in a buffer manager, and logic for assembling the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches logic for accumulating the data fragments in a buffer manager, and logic for assembling the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the computer readable medium of Bernstein and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Bernstein and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

5. Claims 5-8, 13-16, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of Lee and Suzuki as applied to claims 4, 12, and 20 above, and further in view of VanDervort et al. (previously cited US 5,761,191).

Regarding claims 5, Bernstein, Lee and Suzuki do not explicitly teach a statistics memory configured to store statistics associated with the cells.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches a statistics memory configured to store statistics associated with the cells (see column 13, lines 40-51, test processor includes means for recording occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 6, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell if a VCI/VPI is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information, AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 7, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique

VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 8, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 13, Bernstein, Lee and Suzuki do not explicitly teach storing statistics associated with the cells in a statistics memory.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches storing statistics associated with the cells in a statistics memory (see column 13, lines 40-51, test processor includes means for recording occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 14, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error

count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell if a VCI/VIP is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information, AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 15, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as

taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 16, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 21, Bernstein, Lee and Suzuki do not explicitly teach storing statistics associated with the cells in a statistics memory.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches storing statistics associated with the cells in a



statistics memory (see column 13, lines 40-51, test processor includes means for recording occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 22, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell if a VCI/VIP is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information,

AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 23, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored)

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 24, Bernstein, Lee and Suzuki do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Bernstein, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Bernstein, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis A. Alia whose telephone number is (571) 270-3116. The examiner can normally be reached on Monday through Friday, 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/  
Supervisory Patent Examiner, Art Unit 2616

/Curtis A Alia/  
Examiner, Art Unit 2616  
6/12/2008

CAA